

**DUAL METALLOCENE CATALYST FOR PRODUCING  
FILM RESINS WITH GOOD MACHINE DIRECTION (MD )  
ELMENDORF TEAR STRENGTH**

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**Abstract**

10 This invention relates to catalyst compositions comprising a first  
metallocene compound, a second metallocene compound, at least one chemically-  
treated solid oxide, and at least one organoaluminum compound. This invention  
also relates to methods to prepare and use the catalyst compositions and new  
polyolefins. The compositions and methods disclosed herein provide ethylene  
polymers and copolymers with lower MI, increased melt strength, and good MD  
tear properties.

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